

Date: Sat, 30 Oct 93 04:30:22 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V93 #94
To: Ham-Ant

Ham-Ant Digest Sat, 30 Oct 93 Volume 93 : Issue 94

Today's Topics:

Broadcast AM antenna question
Bunk-Bed Antenna (2 msgs)
Coax termination blues.
Help:College wants to broadcast!
Hygain TH5 Antenna
J-Pole lobe (radiation pattern)

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 29 Oct 93 16:09:22 GMT
From: ssec.wisc.edu!orf@rsch.wisc.edu
Subject: Broadcast AM antenna question
To: ham-ant@ucsd.edu

In article <2156@telenet.telenet.com>, deceglie@telenet.com writes:

|This is not really a ham question, but here goes.

|

|I live in the Washington, DC area, and at night I sometimes can pick up a
||broadcast AM station out of New York (1560 kHz). I really love the
|programming, and there is no comparable format that broadcasts locally.
|Oddly enough, my cheapo table radio picks it up better than my expensive
|stereo receiver, yet not good enough.

|

|Is there a home brew antenna solution that will enhance reception?
|I prefer to hook it up to the stereo receiver, which currently uses
|only a simple 300 ohm "T" for FM, and a helical coil for AM, that is

|attached to the back of the receiver.

|

|What about fading, and competing signals at the same frequency from
|other, more distant sources?

|

|E-mail responses please.

|

Tried e-mail, but the mailer says it can't find telnet.com.

A quick, simple, and very effective way to improve AM reception is to use a long wire antenna. If the back of your receiver has a hookup for AM, disconnect your coil (I'm assuming it can be disconnected) and attach one end of a wire to the connector (if there are two connectors, one is probably marked 'ground'; use the other one and leave the ground unused). Simply run your wire along the perimeter of your room or something. You may actually find that the antenna may overload the front end of your receiver. If so, make the wire shorter. I'd start out at about a 20 ft. length or so (the longer the better).

Also, I'd be willing to bet that the coil on the back of your receiver can be swiveled. Helical coils are very directional, and moving it around might improve your reception, too.

Good luck,

Leigh

"Here, the snow is grey. If I were an excitable guy, this would upset me to no end. Instead, I beat on cans. I beat the blues. Where's my angel? Where's my juice? Where's my angel? AAAAAAAAAUUUGH where's my juice?"

--The Suburbs ----->>>WORT 89.9FM Madison, Wisconsin<<<-----

((((((((((((((((((((Listener-sponsored community radio))))))))))))))))))

Date: 26 Oct 93 16:24:17 GMT

From: ncrqw2.ncr.com!ncrhub2!ncrlnk!ncrwc!donald!kthompso@uunet.uu.net

Subject: Bunk-Bed Antenna

To: ham-ant@ucsd.edu

You want something that will not take up room in your place.

Build a J-pole antenna. It is cheap and works well.

--

Ken Thompson NOITL
Disk Array Hardware Development
Peripheral Products MPD-Wichita

NCR Corp. an AT&T company
3718 N. Rock Road Wichita, Ks 67226
(316) 636-8783
Ken.Thompson@wichitaks.ncr.com

Date: 29 Oct 93 05:17:32 PST
From: news.kpc.com!amd!netcomsv!terapin!pjay@decwrl.dec.com
Subject: Bunk-Bed Antenna
To: ham-ant@ucsd.edu

kthompso@donald.WichitaKS.NCR.COM (ken thompson) writes:

>You want something that will not take up room in your place.
>Build a J-pole antenna. It is cheap and works well.
>
>--
>Ken Thompson N0ITL

HOW do you do it? Is there a FAQ on it?

 \ pjay@terapin.com | Terrapin Transit BBS Amiga, IBM, Atari, Apple \
 / Richmond, CA | 6 Lines 3-16.8bps 2+ Gigs 510-644-9328/3770 /

Date: Thu, 28 Oct 1993 00:54:42 GMT
From: yale.edu!cs.yale.edu!wsub.ctstateu.edu!ritterbus001@yale.arpa
Subject: Coax termination blues.
To: ham-ant@ucsd.edu

Hello, Cyber-hams,

I have read a couple of times (notably in the ARRL Antenna Handbook) than when preparing the ends of coax for termination, one should be very careful _not to nick the braid or center conductor_. The articles seemed most emphatic on this point, but did not elaborate, so it raises some questions with me. Perhaps one of you veterans of the coax wars can shed some light on this (Gary Coffman please read.)

- 1) Why not? If I had to guess, I would guess that it had something to do with the skin effect, but this I may be wrong (I was once :-)
How deep a cut is considered a "nick"? A couple of microns? One quarter of the radius?

- 2) Is this heinous crime affected by frequency of use? Proportionately? Exponentially? or worse, logarithmically?
- 3) How important is it? If I nick my coax, must I cut off the end and start again? If so, I had better start with a piece 50% longer than I need :-)
- 4) Those who have ever worked with coax know that theory and practice may diverge ("In theory, theory and practice are the same. In practice, they are not.") This begs the question, how can one strip this nasty stuff with ordinary tools, i.e., not spending a fortune on special strippers, etc.

Thanks,

Jim Ritterbusch N1QNK

ritterbus001@wcsu.ctstateu.edu - or - ne22@radiomail.net (wireless)

One if by LAN, two if by C, three if by C++

Date: 27 Oct 1993 17:44:42 -0500

From: elroy.jpl.nasa.gov!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!

moe.ksu.ksu.edu!matt.ksu.ksu.edu!news@ames.arpa

Subject: Help:College wants to broadcast!

To: ham-ant@ucsd.edu

Hello,

The University I attend has a radio station but it doesn't broadcast over the air its signal is sent through cable only! The head of the department doesn't know what needs to be done to broadcast so I have been asked to check in to it. I need any info on FCC regulations (ie Licenses, minimum Wattage, etc.) I also need info on obtaining or making a transmitter, antenna, etc. Please E-mail me any info you can including Internet sites where I can ftp etc.

Thanks for your time and effort!

fredh@matt.ksu.ksu.edu

Date: Fri, 29 Oct 1993 14:30:57 GMT

From: mustang.mst6.lanl.gov!nntp-server.caltech.edu!elroy.jpl.nasa.gov!usc!

howland.reston.ans.net!news.moneng.mei.com!uwm.edu!caen!usenet.cis.ufl.edu!

usenet.ufl.edu!mlb.semi.@nntp.ucsb.edu

Subject: Hygain TH5 Antenna

To: ham-ant@ucsd.edu

Is the TH5 just a modern TH3 with 2 more elements? I've seen pictures of

it, and it looks like it is fed the same way. I used to have a TH3 and loved it.

Doug, N4IJ

Date: 27 Oct 1993 21:20:59 GMT
From: korie!newscast.West.Sun.COM!abyss.West.Sun.COM!sunspot!myers@ames.arpa
Subject: J-Pole lobe (radiation pattern)
To: ham-ant@ucsd.edu

In article 17175@btree.uucp, hale@btree.uucp (Bob Hale) writes:
>In article <2ah8lvINN6rl@abyss.West.Sun.COM> myers@cypress.West.Sun.COM writes:
>>In article 26432@pony.Ingres.COM, garys@Ingres.COM (Gary Swiger) writes:
>>>I have a couple of questions concerning j-pole antennas:
>>>
>>>1) How directional are they?
>>>2) What is their radiation pattern (lobe)?
>>>
>>
>>Ideally, a J-pole is an end-fed vertical half wave monopole.
>>The bottom of the J is a quarter-wave balanced transmission line
>>with an impedance of around 200 ohms, used to transform the rather
>>high impedance of the end-fed half-wave to something around
>>50 ohms.
>
>
>A J-pole antenna consists of more than one driven element spaced
>closely to a reflector (the pole). A J antenna is a half wave
>long dipole fed by a 1/4 wave long matching section at the bottom.

Really? More than one driven element spaced closely to the pole?
A J-pole is a half-wave long *dipole*? Are you confused?

The only thing you are correct on is the quarter-wave matching section.

Maybe you are talking about what is known as a 4 pole antenna array?

>The pattern from a J-pole is adjustable by moving the elements
>around the pole. If all of the elements are on the same side
>of the pole then the pattern is cardioid and has about a 3 DB gain
>over the omni case. The omni case is obtained by spacing the
>elements equally around the pole; if you have 4 elements then
>they would be spaced every 90 degrees. The pattern won't be
>_exactly_ omni but it will be extremely close. In the cardioid
>case the main lobe is to the side of the pole where the elements
>are mounted.

Oh! I thought you meant 4-pole, where 4 dipolar radiators are attached to a support. The ones I've seen all use folded dipoles... The J-pole, every time I've seen a reference to it, is an end-fed half-wave monopole, like I said in my first post.

>The pattern from a J antenna is that of a half wave dipole;
>e.g., omnidirectional. The fact that it is being fed from one
>end has nothing to do with its radiation pattern or gain. Since
>it is a half wave dipole it has no gain relative to a dipole,
>even though the feed system adds to its length.

Well, yeah, this part is correct with respect to J-poles...

>The above assumes that correct feeding techniques are applied.
>If some portion of the structure that isn't supposed to radiate
>does radiate then the pattern can do lots of bizarre things.

...and this part is correct with respect to 4 poles....

* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

End of Ham-Ant Digest V93 #94

